

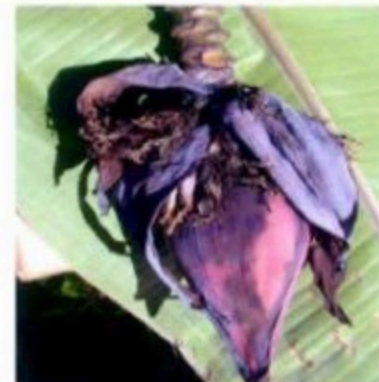


Does gender matter in effective management of plant disease epidemics?

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Presented by Arwen Bailey, December 2017

Why are bananas important?

- Bananas are an important staple food and cash crop for smallholders in East Africa
- Annual production of c.10.6 million tonnes
- Ugandans eat between 220 and 460kg of bananas per person per year -- 17% of calories consumed
- Xanthomonas wilt (BXW) causes yield losses of up to 70% in Uganda
- Yield losses threaten food security



Control practices



However adoption is low... Why?

- Analyze gender, access to agricultural resources and control over them
- Determine whether men and women share similar perceptions toward the effectiveness of the BXW control
- Determine whether gender and farmer perceptions influence on-farm adoption of BXW management practices
- Determine the impact of adoption of BXW practices on food security

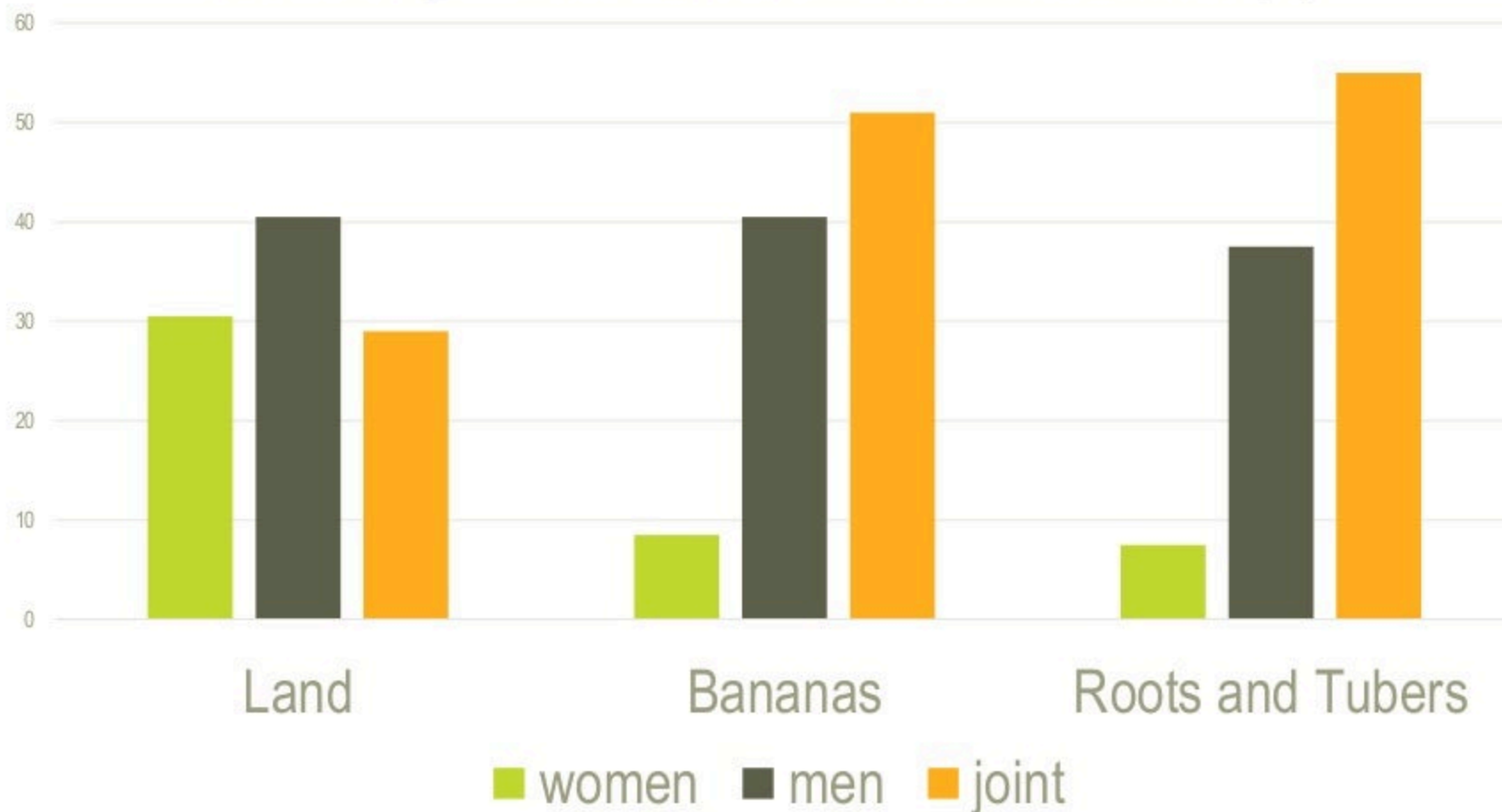


Data collection and analysis

- 18 banana-growing districts purposively selected, with 2 subcounties selected per district and one parish per subcounty
- 227 dual households randomly selected and subjected to face-to-face interviews – one respondent (either male or female) per household
- To estimate food security - Household Food Insecurity Access Scale Index
- Descriptive statistics and multivariate Probit regression utilized for data analysis using Stata 14

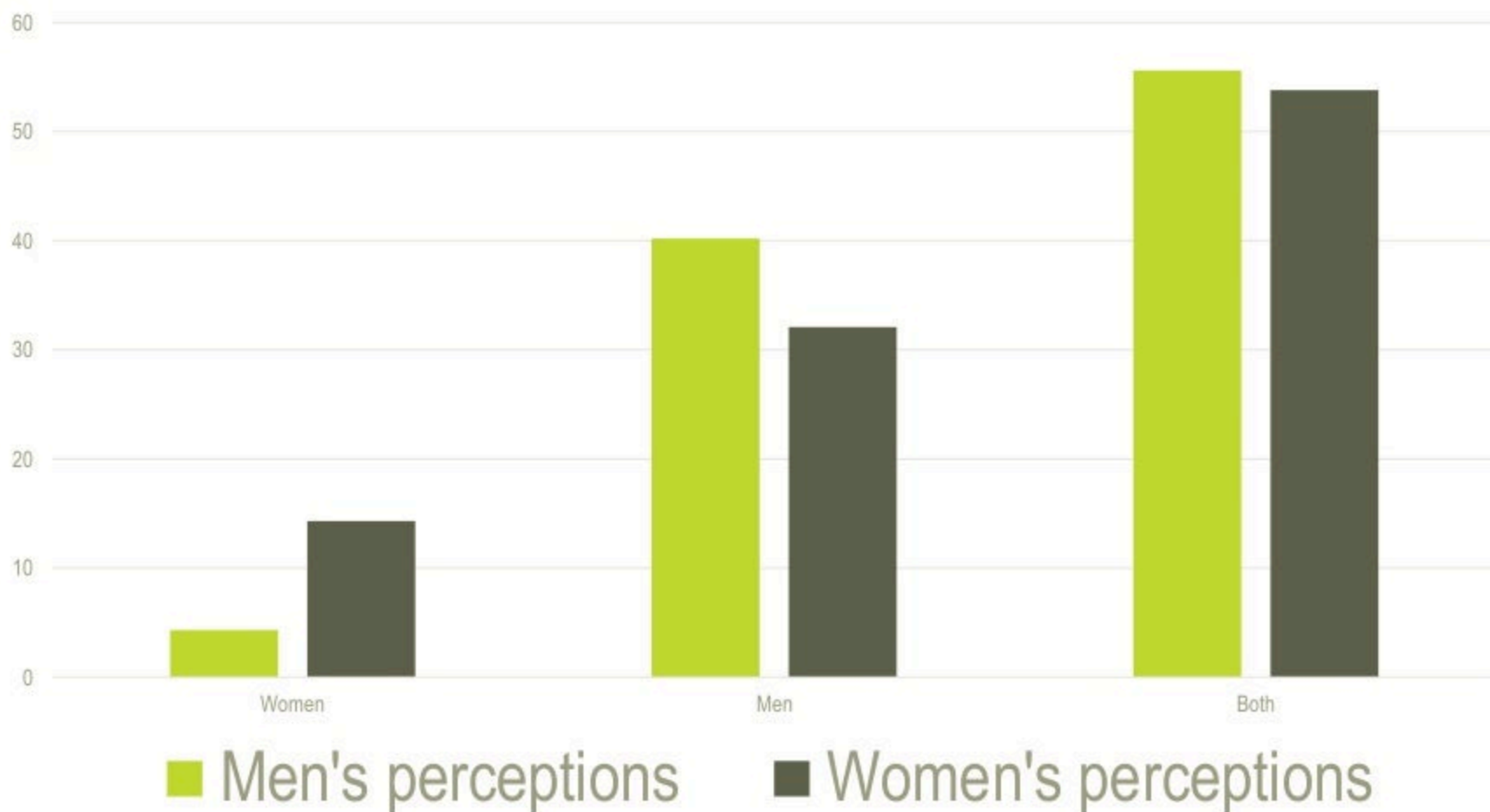
Q1. Assets ownership, access and control

Ownership -- who makes claims on the asset? (%)



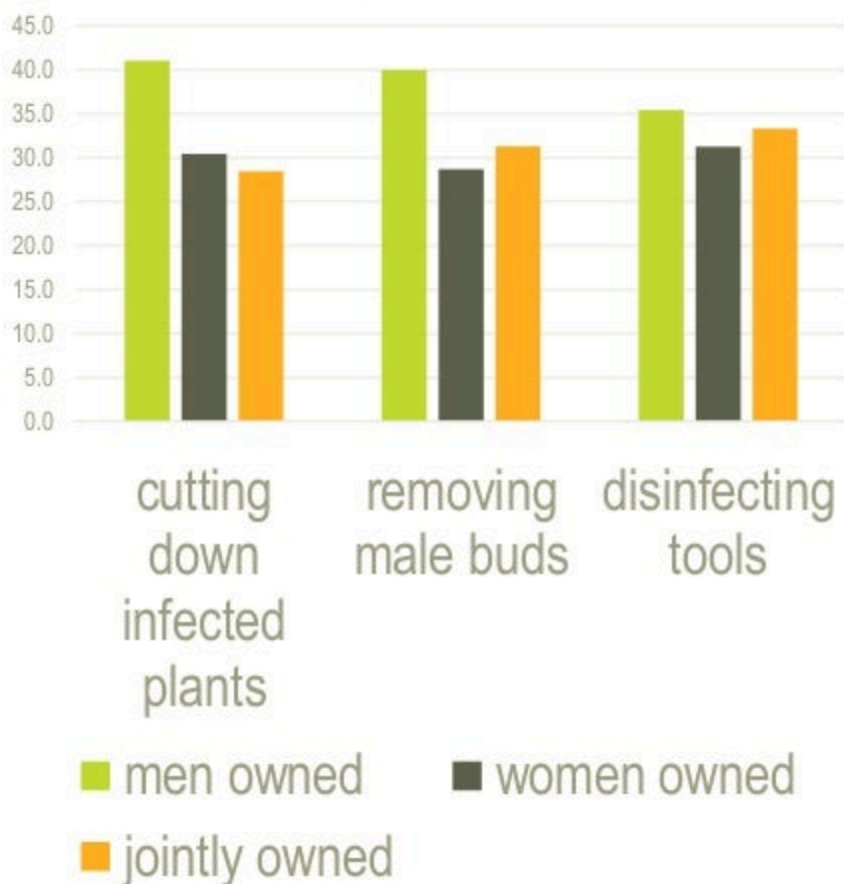
Q1. Assets ownership, access and control

Ownership - Roots and Tubers

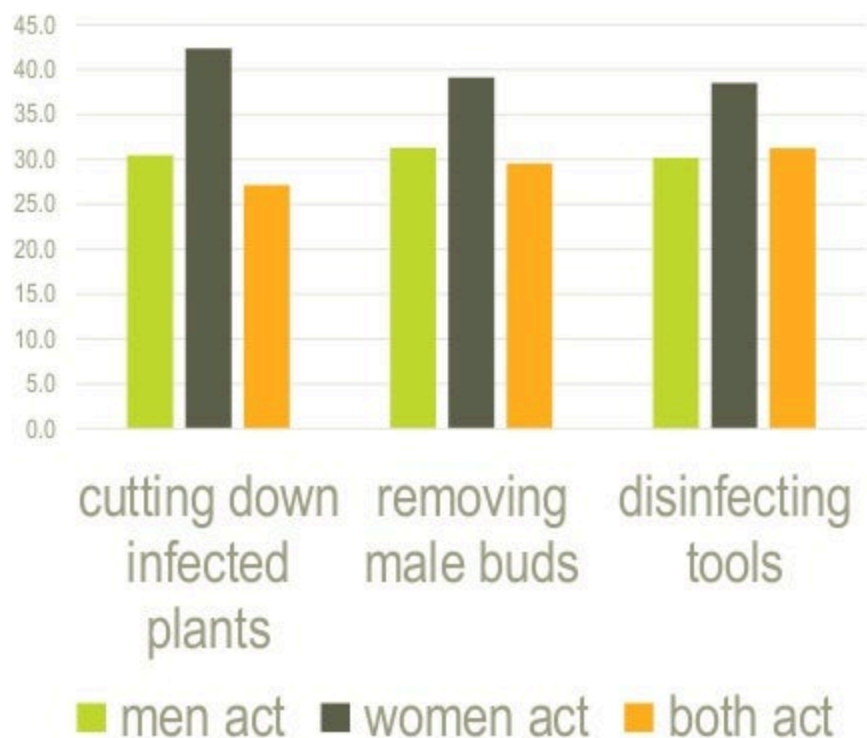


Q2 Perceived effectiveness and adoption of BXW control practices

Control practices used on men, women and jointly owned land



Who implements control practices?

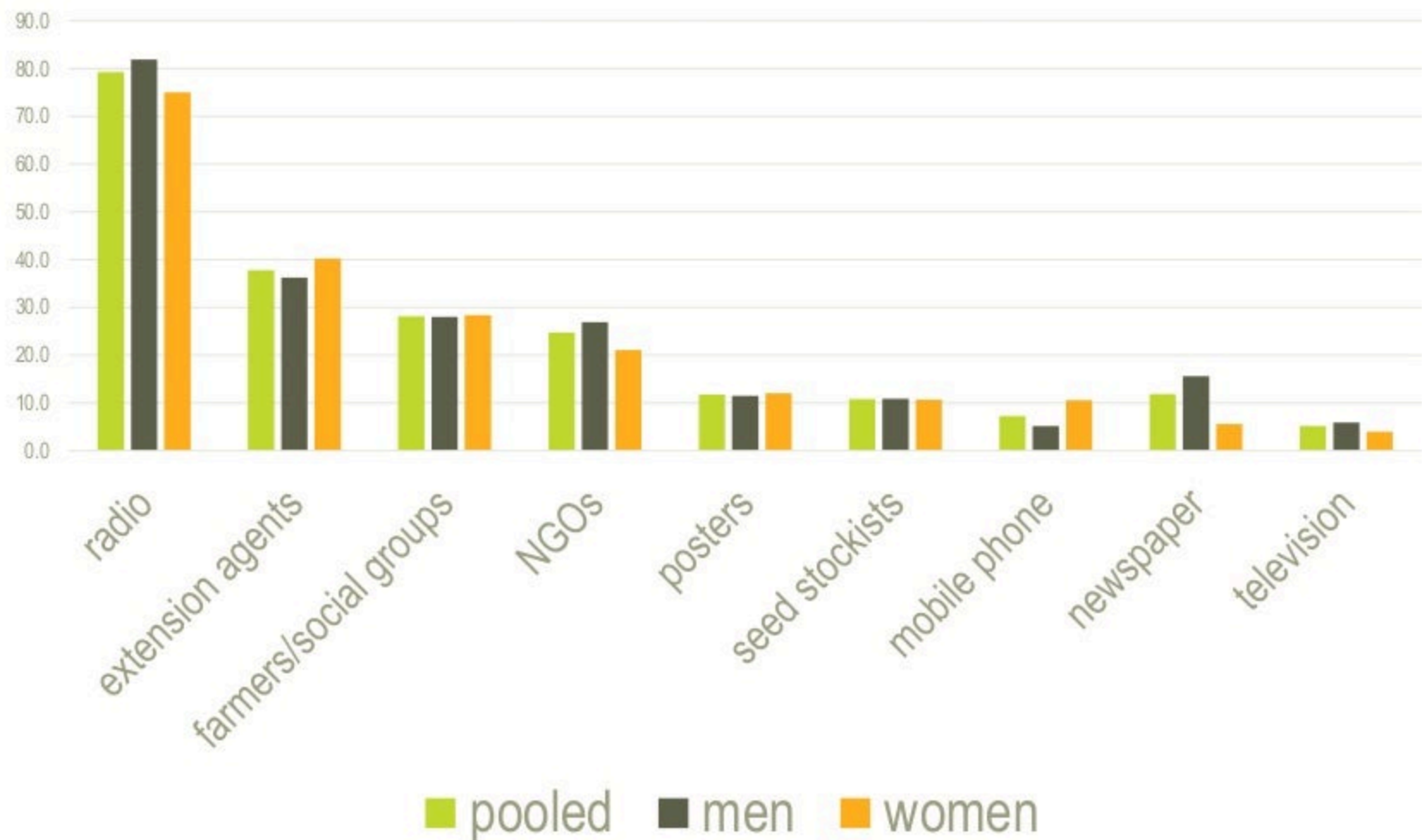


Q3 Factors that influence adoption of BXW control practices

- Farmer **perceptions** on effectiveness of the technologies positively increase adoption of all practices
- **Training** in BXW management positively increases adoption of all practices
- **Importance of banana in diet:** People who buy bananas when their own crop fails are more likely to adopt most of the practices
- **Farm income:** those who spent more on farm inputs were more likely to adopt practices
- **Gender:** Men were more likely than women to decide to cut infected plants (though the actual cutting was mostly done by women)

Q3 Factors that influence adoption of BXW control practices

Sources of information on BXW



Q4 Relationship between food security and adoption of BXW control practices

- Farmers that perceive male bud removal and disinfecting farm tools to be effective are more food secure
- Farmers with at least secondary education were more food secure
- Female-headed and subsistence households were less food secure

Summary

1. Apart from land, which is mainly male owned, most ownership, control and income are jointly shared.

But perceptions differ between men and women regarding who owns, decides and spends what

2. Overall adoption of BXW control practices is low, more likely on male-owned land, and more likely carried out by women.

3. Perceptions of efficacy, training, importance of banana in diet, farm income and gender are the main factors influencing adoption

And most information about the disease comes from radio and face-to-face channels

4. Some profiles of farmer seem to link adoption of BXW practices with food security

Conclusions

- Increasing women's ownership, access and use of household assets is an inherent component of all BXW management efforts and programmes
- Farmer perceptions are critical and essential for scaling up and out BXW control and management
- We need to increase positive perceptions of controls among men and women. Radio and face-to-face channels are best for this
- We still need to understand better the mechanisms between perceptions, assets and action
- This research is a good place to start to manage the extreme threat that BXW poses to Ugandan livelihoods



Thank you

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